

**NATIONAL WEATHER SERVICE INSTRUCTION 10-1602**

**May 11, 2010**

**Operations and Services  
Performance, NWSPD 10-1602  
SERVICE EVALUATION**

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**SUMMARY OF REVISIONS:**

This directive supersedes National Weather Service Instruction (NWSI) 10-1602, dated January 4, 2006.

The following changes were made:

1. Appendix B, Section 1d, inserted NWSChat and Social Networking (e.g., Facebook) as examples of partners/users feedback methods.
2. Appendix B, Section 3, third sentence, two program areas were added: climate, and hurricane.
3. Appendix B, Sections 3c and 3d, included Interactive NWS (iNWS), NOEES, and NWSChat as other activities to be evaluated.
4. Appendix B, Section 4 has been divided into two sections: 4.1 Outreach Activities, and 4.2 Program Evaluations.
5. Appendix C, added a definition for the term "User."
6. Improved readability and clarity throughout the document.
7. Updated formatting to be consistent with NWSI 1-101 dated October 15, 2009.

/signed/

4/27/10

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Date

**Service Evaluation**

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**1 Objectives**

The objectives of the service evaluation program are to measure service quality, identify service improvement areas, and encourage use of best practices throughout the organization.

**2 Evaluation at National Weather Service and NWS Regional Headquarters**

National Weather Service Headquarters (NWSHQ) offices and regional headquarters will hold periodic workshops and/or use other methods to interact and cooperate with NWS partners. Feedback from partners will contribute to policy changes and service improvements. Where applicable, NWSHQ offices and regional headquarters should hold joint activities when working with partners and users.

### **3 Evaluation at Weather Forecast Offices (WFO)**

Due to the number of partners, WFOs are encouraged to use teams for obtaining feedback. Appendix A provides guidance on the creation and use of teams. Each office will document evaluation and outreach activities and summarize changes made to services resulting from partner/user feedback. Based on outreach activities and interaction with users, each office will be able to summarize the overall level of user satisfaction in the various program areas including: (1) major areas of user concerns, and (2) programs/efforts that have been well received. Recommended and preferred practices are included in Appendix B.

### **4 Evaluation at Center Weather Service Units (CWSU)**

Evaluations at CWSUs will focus on its internal activities and service to the FAA and aviation community. The Meteorologists-in-Charge (MIC) of the CWSU, local Air Route Traffic Control Center personnel and the associated WFO will collaborate on CWSU evaluation and determine:

- a. frequency and scope of evaluation activities;
- b. reporting requirements; and
- c. the level of support (e.g., staff, training, coordination, etc.) provided by the WFO and regional headquarters.

### **5 Evaluation at National Centers for Environmental Prediction**

NCEP management will determine the breadth and scope of NCEP's evaluation program, as well as the schedule of evaluation activities. Evaluation activities should be ongoing so partner/user feedback is continuous and there is prompt identification and resolution of problems. Where applicable, NCEP should hold joint evaluation activities with NWSHQ offices, regional headquarters, and WFOs with national center-type responsibilities.

### **6 NCEP Evaluation for NWS Internal Partners**

Teams should be formed to gather feedback from the various constituencies in the NWS. NCEP will determine how these constituencies should be grouped, for example:

- a. meteorology, hydrology, computer science, etc.;
- b. aviation, marine, long-range prediction, etc.; and
- c. WFOs, River Forecast Centers, CWSUs, etc.

Evaluation activities will include but not be limited to:

- a. quality and usability of NCEP services, including models, model data, and other products;
- b. ease of access to NWS employees;
- c. collaborative research efforts;
- d. internal processes leading to more efficient operations; and
- e. collaborative activities among Centers and WFOs with center-type responsibilities issuing similar products.

NCEP will also determine the methods whereby evaluations will be accomplished (workshops, visiting scientist programs, etc.).

## **7 NCEP Evaluation for NWS External Partners and Users**

Gathering feedback via workshops or other methods should be employed on a periodic basis. They will determine:

- a. the satisfaction level of external partners and users with NCEP products and services;
- b. effectiveness of NCEP/partner relationship in serving users;
- c. ease of access to external users and partners;
- d. quality and utility of NCEP services, including models, model data, and other products;
- e. needed improvements in products and services;
- f. partner/user impact on future models, products and services; and
- g. other information as determined by NCEP and/or its partners and users.

NCEP will also determine the methods whereby evaluations will be accomplished.

## **8 Managing Service Evaluation Results**

Offices are encouraged to share evaluation successes and failures with other offices. Regional and National service program managers should monitor this information exchange/flow, and publicize the most effective strategies for running a successful program. WFOs with national center-type responsibilities in aviation, marine, hurricane, and other programs should encourage the exchange of information with NCEP. Problems uncovered by the evaluation process at individual offices or Centers will be addressed by the respective region or NCEP unless the problem is national in scope or otherwise requires NWSHQ collaboration.

**APPENDIX A – Teams**

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**1 Teams**

These guidelines are written with the philosophy that team operations are indispensable for service evaluation. When used effectively, teams:

- a. empower employees, raise morale through staff ownership of the team process, and result in employee buy-in;
- b. enable innovative staff-supported solutions through thorough analysis of the problem;
- c. create an environment of continual improvement that allows an office to function with greater efficiency.

**2. Managers**

Managers are responsible for forming and guiding teams, as well as providing a charter for each team. The charter should include:

- a. a vision (the ideal state for the future);
- b. a mission (clear statement of the issue the team should address and goals the team will accomplish);
- c. team membership and assigned responsibility, including the leader;
- d. scope of authority (decision-making capacity, budget, other resources, limitations or constraints);
- e. termination date (project completion);
- f. success criteria (how the team will know it has accomplished its mission).

### 3 Sample Team Charter

A sample team charter is shown below. Teams should be chartered for a specific time period. Before the termination date, the necessity for continuation should be determined and, if necessary, a new charter issued. In normal circumstances, the need for re-chartering is for teams addressing ongoing issues on a periodic basis, such as user feedback for a specific program.

Vision: WFO XYZ and the media in the WFO's area of responsibility will collaborate to provide superior public service.

Mission: The WFO XYZ Outreach Team will develop a process to provide prompt:

- Updates to the media on changes to WFO products services and procedures.
- Response to media questions and requests.
- Method to determine a baseline measure of media's relationship with WFO and then to determine percent improvement.

Team Membership: Team membership and assigned responsibility:

Barbara Brown - Team Leader  
Bob Black – Forecasting  
George Gray – Emergency Management  
Gordon Green – Outreach Activities  
Wendy White – Public Access

Scope of Authority: The team can require all office staff, except electronic technicians, to conduct research for the project.

- Staff time cannot exceed 4 hours per person.
- The plan is to be implemented with no additional office staff.
- The plan is to be implemented with no changes in regional/national policy.
- The team may spend up to \$1,000 to plan and implement.
- The plan's operating costs cannot exceed \$1,500 per year.

Termination Date: Implementation by September 1, 2010. Adjust by October 1, 2010.

Success Criteria: The WFO XYZ Outreach Team will have been successful when 70 percent of county warning area media outlets state their relationship with the WFO has improved.

**APPENDIX B – Recommended and Preferred Practices**

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**1 WFO Evaluation Methods**

- a. The Warning Coordination Meteorologist (WCM) will manage the evaluation activities and recommendations to the Meteorologist in Charge (MIC). The WCM will also summarize recommended changes to products and services for the office management team.
- b. Obtain evaluation data through feedback from partners and users to determine the level of satisfaction with the office's products and services.
- c. WFOs will seek the help of their respective regional headquarters when weighing adherence to NWS policy against modifying products and services. Examples of possible changes to products and services include the use of characteristic terminology or wording common in the local area and the provision of additional avenues of personal contact. Any changes are coordinated with the regional headquarters.
- d. Teams should be used (see Appendix A) to develop a rapport with partners and users so that evaluation feedback is continuous, and there is prompt identification and resolution of deficiencies. Examples of feedback methods are face-to-face meetings, workshops, seminars, telephone/conference calls, service outage emails and call-in reports ( <mailto:nwroutage@noaa.gov> ) announcements over the National Oceanic and Atmospheric Administration (NOAA) Weather Radio All Hazards, the Internet, NWSChat, as well as the utilization of government-approved Social Networking/Social Media accounts (e.g., the NWS Facebook page), etc.



## **2 WFO Internal Evaluation**

Internal evaluation of WFO operations includes all activities that support or lead to provision of the office's products and services. Normally internal changes should be driven by partner/user requests or requirements based on evaluation of external products and services. Changes to operations that are the result of management directive, union negotiation, or employee/team suggestions and are determined to have a major impact on products or services should be discussed with partners and users to ensure there is no decrease in satisfaction. Internal activities and processes chosen for evaluation should be those most likely to result in tangible improvements readily apparent to NWS partners and users.

## **3 WFO External Evaluation**

External evaluation covers those areas of WFO operations that are "visible" to partners and users. In most cases this consists of the products and services the office provides to partners and users. The routine and/or hazardous weather information in the following service areas, if applicable, will be evaluated: fire and public weather, climate, aviation, marine and coastal, and hydrology.

Other activities for evaluation include but are not limited to:

- a. Office interaction and partnership with the media, emergency managers, and other government agencies;
- b. Outreach activities (school visits, spotter and other weather-related talks, participation at boat shows, weather training for HAM radio operator networks, interviews, etc.);
- c. NOAA Weather Radio All Hazards, NOAA Weather Wire Service, Emergency Managers Weather Information Network, Interactive NWS (iNWS), NWSChat, NWS Outreach and Education Event System (NOEES), and other NWS dissemination systems; and
- d. Public and partner access (ease of use in accessing NWS Internet sites, iNWS, NOEES, digital telephone answering systems, office visits, etc.).

## **4 Documentation**

### **4.1 Outreach Activities**

NOEES and the Integrated Database for Education and Awareness are available computer software applications to assist in the documentation of outreach activities. This software provides the forecaster with the capability to enter data such as: event type, date, audience, topics discussed, number of attendees, location, and feedback.

## **4.2 Program Evaluations**

Offices may find it useful to document program evaluations annually by including the following information:

- a. An innovative evaluation process/feedback method used other than the normal interaction with users including the benefits derived from such activities;
- b. A summary of the products, services, programs and initiatives with supporting commentary on effectiveness including a description of any product and/or service that was particularly well received by partner/users;
- c. Major concerns, issues, or problem areas associated with products and services;
- d. Trends, as appropriate; and
- e. Success stories.

**APPENDIX C – Glossary of Terms**

**Service Evaluation** - The process of determining how users value NWS products and services. The determination is made by qualitative and quantitative feedback from partners and users.

**Qualitative Feedback** - The value of products and services to partners and users. It takes the form of subjective data (comments, compliments, complaints, etc.).

**Quantitative Feedback** - The utility of products and services to partners and users. It takes the form of objective data (timeliness, clarity, ease of use, etc.).

**Office Evaluation** - Review of field office integrity, including compliance with policies, internal controls, information technology, facilities, and human and fiscal resource management.

**Partner** - Companies, corporations, vendors, agencies, universities, etc., that associate with NWS in the distribution of weather information and services.

**Public** - The people of a parish, county, independent city, commonwealth, state, territory, region, or nation.

**User** - An individual, government agency, or other entity which uses NWS water, weather, and climate information and services for making critical decisions.